



322719

RECEIVED

SEP 2 1995

RESPONSE SECTION 3

**FOCUSED SITE INSPECTION PRIORITIZATION
SITE EVALUATION REPORT**

**MOBIL CHEMICAL CORPORATION PHOSPHORUS DIVISION GARY PLANT SITE
1040 MICHIGAN STREET
GARY, INDIANA
LAKE COUNTY**

CERCLIS ID NO.: IND000606731

Prepared for:

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
SITE ASSESSMENT SECTION
77 West Jackson Boulevard
Chicago, Illinois 60604**

Date Prepared: August 8, 1995
U.S. EPA Region: 5
Contract No.: 68-W0-0037
Technical Direction Document No.: T05-9503-281
Prepared by: Ecology and Environment, Inc.
Ann Chung
E & E Program Leader: Steven Skare
Telephone No.: (312) 663-9415



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

recycled paper

-1192
W. C.

TABLE OF CONTENTS

| <u>Section</u> | | <u>Page</u> |
|---------------------|--|-----------------|
| 1 | INTRODUCTION | 1-1 |
| 2 | SITE DESCRIPTION AND HISTORY | 2-1 |
| 3 | PREVIOUS INVESTIGATIONS | 3-1 |
| 4 | SITE RECONNAISSANCE | 4-1 |
| 5 | MIGRATION AND EXPOSURE PATHWAYS | 5-1 |
| | 5.1 GROUNDWATER MIGRATION PATHWAY | 5-1 |
| | 5.1.1 Geology and Soils | 5-1 |
| | 5.1.2 Groundwater Releases | 5-2 |
| | 5.1.3 Targets | 5-2 |
| | 5.2 SURFACE WATER MIGRATION PATHWAY | 5-2 |
| | 5.3 SOIL EXPOSURE PATHWAY | 5-3 |
| | 5.4 AIR MIGRATION PATHWAY | 5-4 |
| 6 | SUMMARY | 6-1 |
| 7 | REFERENCES | 7-1 |
| <u>Appendix</u> | | <u>Page</u> |
| A | SITE RECONNAISSANCE PHOTOGRAPHS | A-1 |
| B | 4-MILE RADIUS MAP | B-1 |
| C | 1987 SSI ANALYTICAL RESULTS/1989 MOBIL MINING AND MINERAL ANALYTICAL DATA | C-1 |
| D | POPULATION ESTIMATES | D-1 |

1. INTRODUCTION

The Ecology and Environment, Inc. (E & E), Technical Assistance Team (TAT) was assigned by the United States Environmental Protection Agency (U.S. EPA), under Contract No. 68-W0-0037, Technical Direction Document (TDD) No. T05-9503-281, to evaluate the Mobil Chemical Corporation Phosphorus Division Gary Plant site in Gary, Lake County, Indiana as a potential candidate for the National Priorities List (NPL).

The purpose of assessment of sites listed in the Comprehensive Environmental Response Compensation Liability Information System (CERCLIS) data base is to determine whether these sites are candidates for inclusion in the NPL. This determination is made using the Hazard Ranking System (HRS). Any site eligible for placement in the NPL must have an overall score of 28.50. Additional investigations in the form of Screening Site Inspection (SSI) and/or Expanded Site Inspection (ESI) are conducted for those sites whose preliminary HRS Score is greater than 28.50. The site is scored or re-scored after SSI and/or ESI to determine its eligibility for placement in the NPL.

The goal of a Focused Site Inspection Prioritization (FSIP) is to gather any additional information necessary, following the completion of the SSI (prior to the implementation of the revised HRS), to help set priorities among sites for NPL listing or to screen them from further Superfund attention. FSIPs can be performed on sites with completion dates prior to August 1, 1992 in CERCLIS, for these were most likely not evaluated using the revised HRS model.

The FSIPs are conducted using the revised HRS model, which was promulgated and published in the Federal Register (55 FR 51532) in December 1990 and which supersedes the original HRS. If the existing information supports the determination that additional investigation is not necessary, the site is designated as requiring no further remedial action (NFRAP). Sites can also be NFRAPed without scoring if the following conditions exist: no

waste is present at the site; site at which the only known or suspected releases to the environment are due to petroleum products; site is regulated under the Resource Conservation and Recovery Act (RCRA). Background information was obtained from U.S. EPA files for the Mobil Chemical Corporation Phosphorus Division Gary Plant site, an on-site reconnaissance (see Appendix A for site reconnaissance photographs), and a Mobil Mining and Minerals Company Site Investigation report.

This report is organized into seven sections, including this introduction. Section 2 describes the site and provides a brief site history. Section 3 provides information about previous investigations conducted at the site. Section 4 provides information on the site reconnaissance. Section 5 provides information about the four migration and exposure pathways (groundwater migration, surface water migration, soil exposure, and air migration). Section 6 is a summary of the FSIP. References used in the preparation of this report are listed in Section 7.

2. SITE DESCRIPTION AND HISTORY

The Mobil Chemical Corporation Phosphorus Division Gary Plant (Mobil) site is located at 1040 Michigan Street, in Gary, Lake County, Indiana (sec. 11, T. 36 N., R. 8 W.). Coordinates for the site are latitude 41°35'30" North and longitude 87°18'45" West. The site location along with a wetland inventory is shown on Figure 2-1. The site is located approximately 2,000 feet west of the interchange of Interstate Highways 90 and 65 in a predominantly industrial area. The Mobil site consists of two areas: a 5.3-acre tank area and a 13-acre alleged dumpsite. There are two lakes located within this site: an unnamed lake and a man-made lake. The site is bound on the west by Michigan Street and on the south partially by open fields and the Electrician's Union Building. Located on the eastern one-half of the site is Steelworker's Union Building and several related smaller buildings. A 4-mile radius map of the site study area is provided in Appendix B. The site is located on the east side of the city of Gary. A densely populated urban area exists around the site. The closest residential area is approximately 0.5 miles from the site (United States Geological Survey [USGS] 1979; E & E 1987).

The tank area is currently owned by Beaver Oil, Inc. Montgomery Tank Lines owned this property from 1975 to 1993. From 1965 to 1975, Mobil Chemical Company operated a production plant for food grade phosphoric acid at the tank area. As part of the plant operation, Mobil Chemical Company had installed and operated a concrete catch basin which was used as a primary separator during that time. Mobil Chemical Company voluntarily instituted a cleanup program to address the tanks and tank areas, including the catch basin, before the facility was sold. The cleanup program was not supervised or inspected by any regulatory agencies and specific information regarding the cleanup is not available. The concrete catch basin is still present on site, however, it is not currently in use.

The site terrain is sloped to drain surface runoff from the site into the catch basin. An unnamed lake is located approximately 500 feet west of the tank area. The unnamed lake is an isolated body of water with no associated wetland. There are seven tanks located in the center of a fenced area north of the catch basin. The tank area is entirely fenced and the front gate is locked at night (E & E 1995a; 1987).

The alleged dumpsite is located approximately 2,000 feet west of the Interstate 90-65 interchange. This parcel of land measures approximately 400 feet by 1,400 feet, or 13 acres, in size. South of the Steel Workers's Building is a black-topped parking lot, approximately 60,000 square feet in size. Numerous large trees border the site north of a dirt path, adjacent to the man-made lake. A man-made lake is located directly north and adjacent to the alleged dumpsite. There are approximately 0.3 miles of wetland frontage along this man-made lake. See Figure 2-1 for map of nearby wetlands (United States Fish and Wildlife Service [USFWS] 1981). The man-made lake is an isolated body of water. The terrain in the alleged dumpsite area slopes toward the man-made lake. This lake receives surface water runoff from the alleged dumpsite which is currently used as a picnic area by Steelworker's Union employees. The alleged dumpsite appears to be on private property owned by the Steelworker's Union, however, there is no fencing around the site to restrict access from trespassers (E & E 1987).

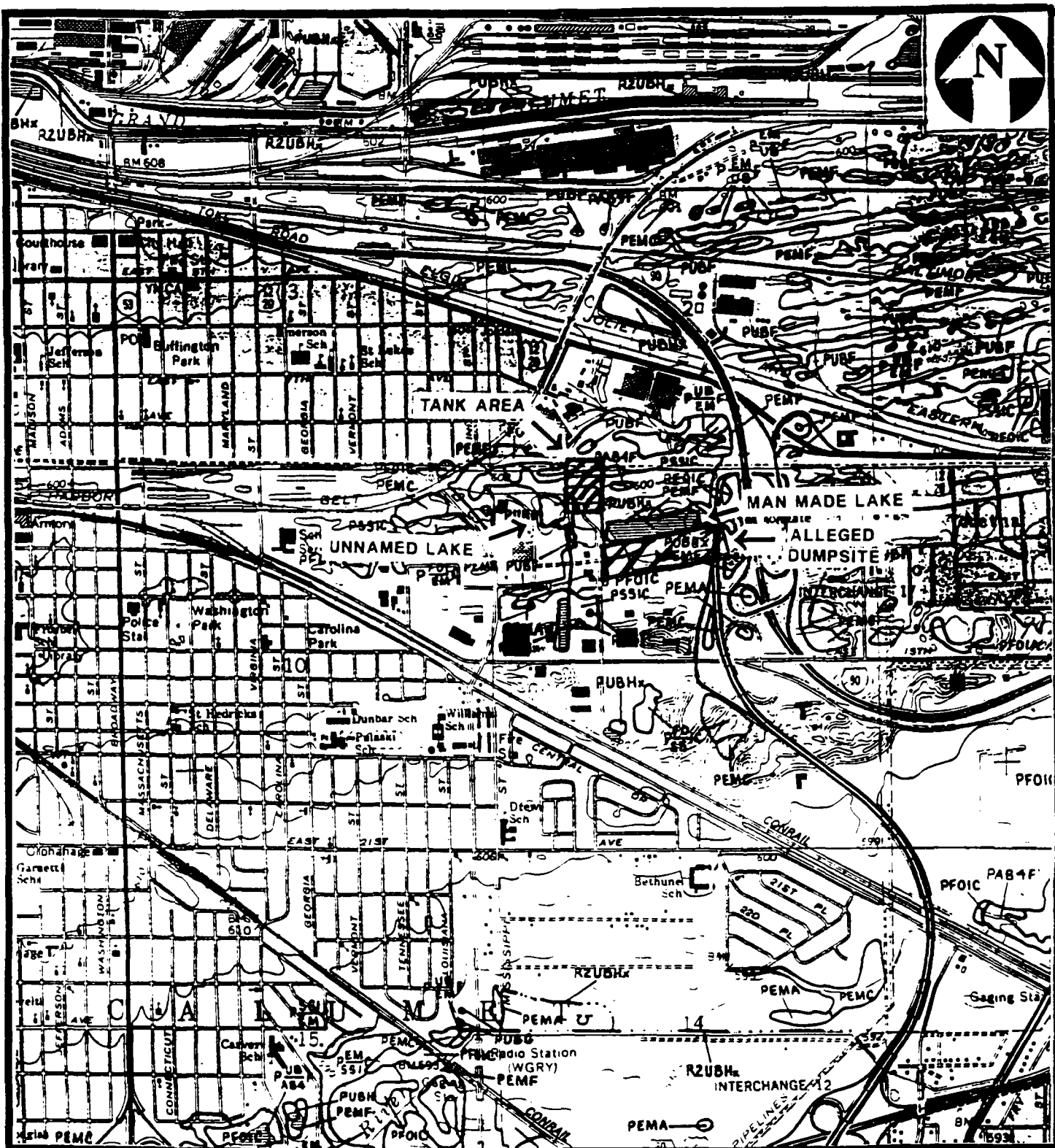
Beaver Oil, Inc. currently uses the site as an oil processing, storage, and transfer facility. Oil processing at this facility includes distillation, acid emulsification, fuel stripping, separation, and filtering of oil (E & E 1995a). From 1975 to 1993, the tank area was owned by Montgomery Tank Lines, which leased part of the site to Gary Products Corporation. Montgomery Tank Lines used part of the facility as a transfer station for trucks carrying food products and/or soap. Gary Products Corporation is involved in soap manufacturing and packaging. Mobil Chemical Company operated a production plant for food grade phosphoric acid at the present tank area from 1965 to 1975 (E & E 1995a; 1987).

In the late 1970s, Mobil Chemical Company decided to sell the property. In accordance with RCRA requirements, prior to the sale, Mobil Chemical Company reported to the U.S. EPA that approximately 100 tons of drummed plant wastes were buried on the plant property. The primary hazardous components of the wastes were reported to be arsenic mixed along with large amounts of clay and sands from filtering operations, along with low levels of other metallic compounds including selenium, antimony, iron, magnesium, and

manganese. There is no known data on the level of leachability of arsenic from this buried waste.

Mobil Chemical Company has stated that all drummed wastes disposed of on the property were solid wastes. Originally, process waste was identified as having been deposited exclusively at the tank area (see Figure 2-2 for tank area site features). However, it was later hypothesized by Mobil Chemical Company that this process waste may have been disposed of on the 13-acre area (alleged dumpsite) contiguous to the facility, east of Michigan Street (see Figure 2-3 for alleged dumpsite site features) (E & E 1987).

Mobil Chemical Company instituted a cleanup program to address the tanks and tank areas before the facility was sold. The Mobil Chemical Phosphorus Division site is not listed on the Resource Conservation and Recovery Act Information System (RCRIS) for the state of Indiana (U.S. EPA 1995).



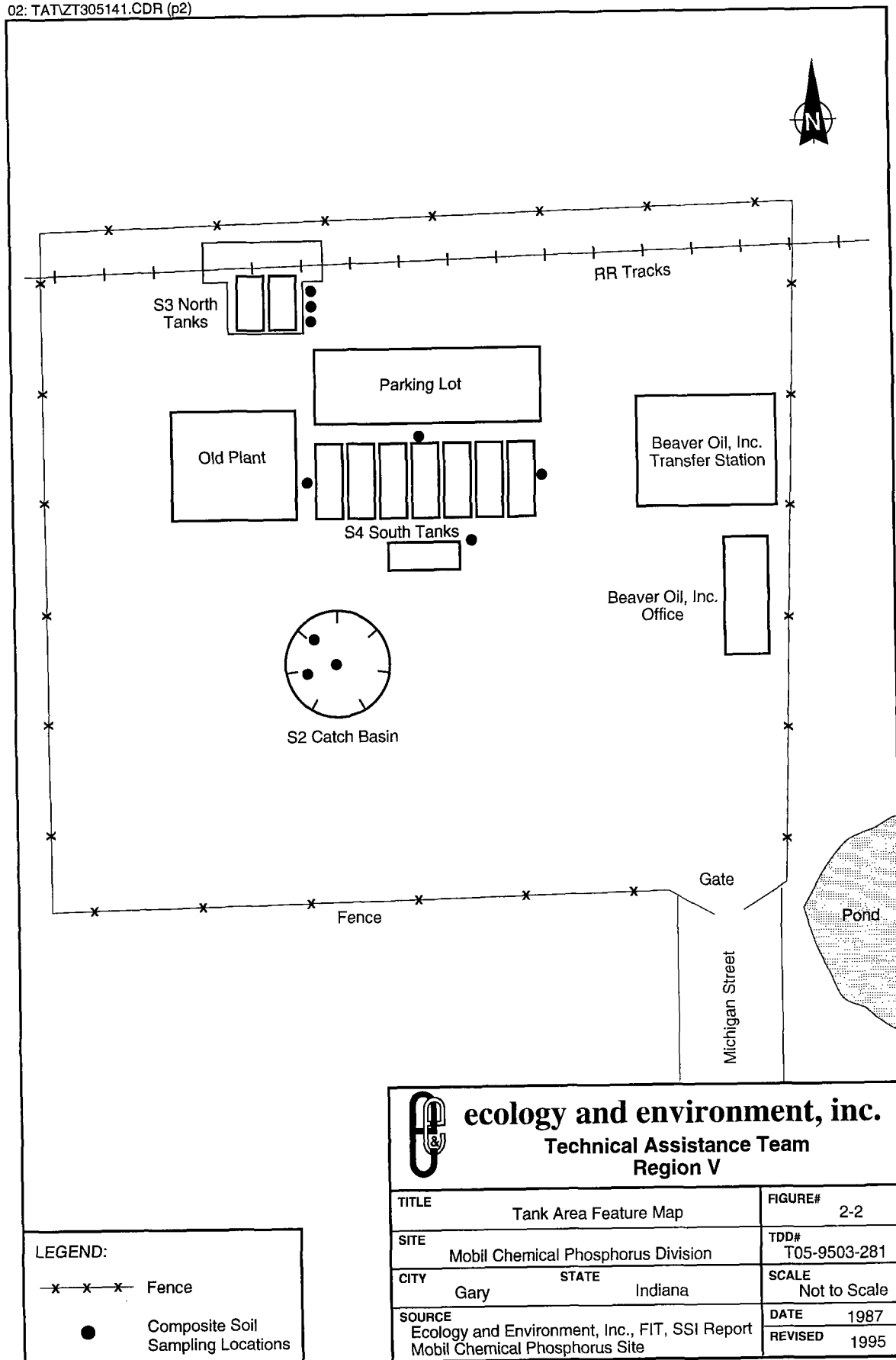
LEGEND

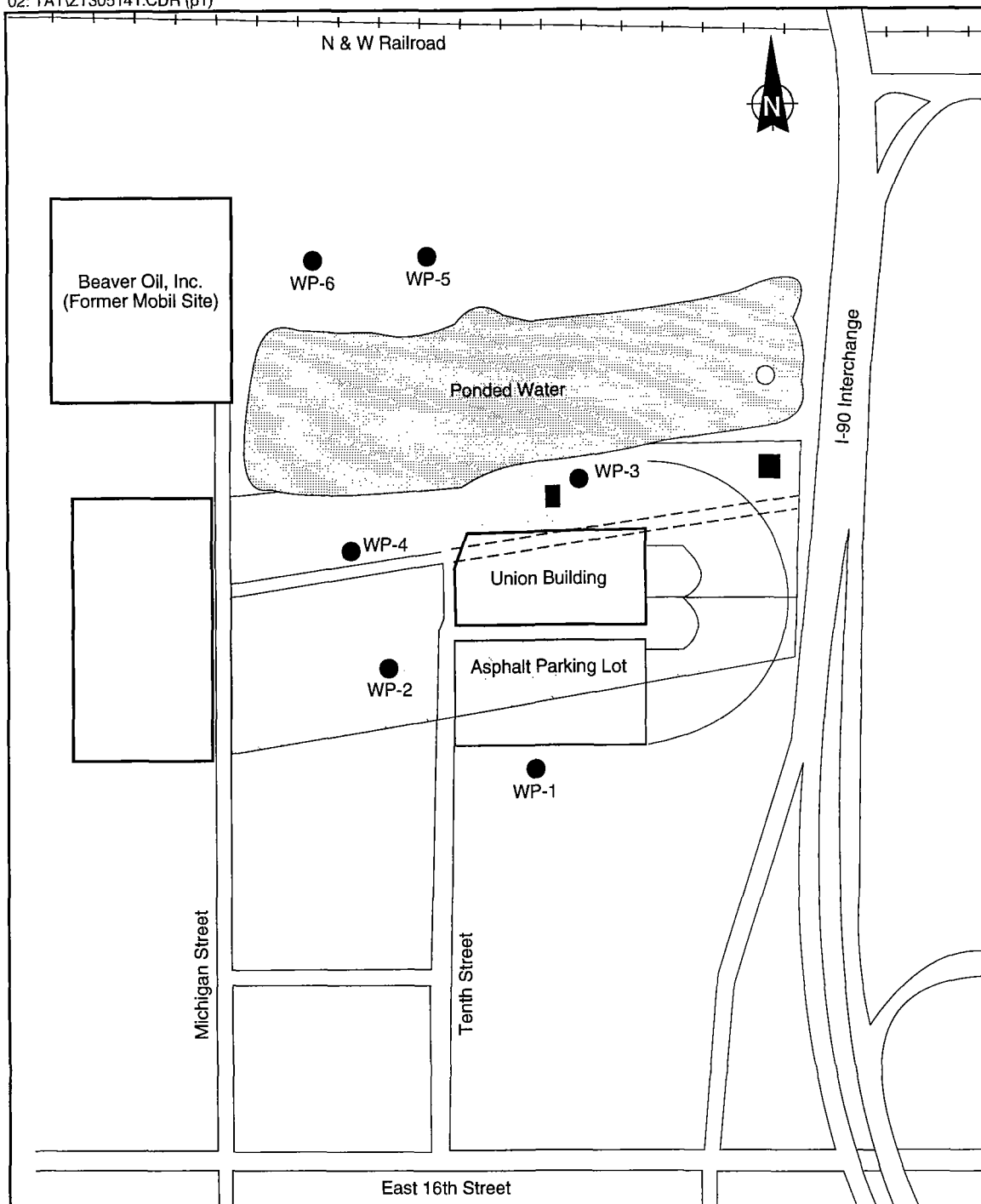
- | | |
|----------------------------|------------------------------|
| P = Paulustrine | F = Semi-permanently flooded |
| LI = Littoral | C = Seasonally flooded |
| EM = Emergent | A = Temporarily flooded |
| OW = Open water | H = Permanently flooded |
| FO = Forested | h = Diked/Impounded |
| SS = Scrub/Shrub | x = Excavated |
| UB = Unconsolidated Bottom | U = Upland (not wetland) |
| AB = Aquatic Bed | 1 = Broad-Leaved Deciduous |
| | 4 = Floating Vascular |



ecology and environment, inc.
Technical Assistance Team
Region V

| | | | |
|--------|---|----------|--------------|
| TITLE | Site Location Map/Wetland Map | FIGURE # | 2-1 |
| SITE | Mobil Chemicals-Phosphate Div. | TRAC | T05-9503-281 |
| CITY | Gary | STATE | Indiana |
| SOURCE | U.S. Dept. of Interior, Wetlands Inventory Map, Gary, IN. | SCALE | 1:24,000 |
| | | DATE | 1981 |
| | | REVISED | 1993 |



**LEGEND:**

Geophysical Survey Area



Groundwater Sampling Locations

Sediment and Surface Water
Sampling Locations**ecology and environment, inc.****Technical Assistance Team
Region V**

| | | |
|--|------------------|-----------------------|
| TITLE Alleged Dumpsite Feature Map | | FIGURE# 2-3 |
| SITE Mobil Chemical Phosphorus Division | | TDD# T05-9503-281 |
| CITY Gary | STATE Indiana | SCALE Not to Scale |
| SOURCE Mobil Mining and Minerals Co. Report Mobil Chemical Phosphorus Site | | DATE 1987 |
| | | REVISED 1995 |

3. PREVIOUS INVESTIGATIONS

In the late 1970s, Mobil Chemical Company decided to sell the site property. The site was initially discovered through Mobil Chemical Company. Mobil Chemical Company filled out U.S. EPA Form No. 8900-1 "Notification of Hazardous Waste Site" prior to sale of its property which prompted a Preliminary Assessment (PA) conducted by U.S. EPA in 1983. In accordance with RCRA requirements, prior to sale, Mobil Chemical Company reported to the U.S. EPA that approximately 100 tons of drummed plant wastes were buried in the tank area. Mobil Chemical Company has stated that all drummed wastes disposed of on the property were solid wastes. However, it was later hypothesized by Mobil Chemical Company that this process waste may have been disposed of on the 13-acre area (alleged dumpsite) contiguous to the facility, east of Michigan Street (E & E 1987).

On June 12, 1987, E & E FIT, under contract to the U.S. EPA, conducted a Screening Site Inspection (SSI). During the SSI, FIT interviewed the owner and operator and collected three on-site soil/sediment samples around the two tank areas and within the catch basin as well as a background sample. The analytical results from the soil sampling indicated the presence of organic and inorganic compounds above three times the background concentrations. A summary of Target Analyte List (TAL) and Target Compound List (TCL) chemicals detected in soil samples attributable to the site is provided in Appendix C (E & E 1987).

Prior to 1989, Mobil Chemical Company acquired access to the tank area and to other adjacent properties to conduct a thorough investigation of the alleged dumpsite area. In 1989, Woodward-Clyde Consultants were tasked on behalf of Mobil Mining and Minerals Company, a subdivision of Mobil Chemical Company, to conduct geophysical surveys and environmental media testing of groundwater, surface water, and lake sediments surrounding the alleged

dumpsite. An electromagnetic induction survey utilizing the in-phase component of the instrument-generated magnetic field was conducted to locate buried drums. The in-phase components are affected by buried metal objects only. The survey did not reveal any major anomalies which would be indicative of buried drums. Excavations to verify slight anomalies did not uncover any drums. Excavations in several suspicious looking lumpy (hammocky) areas also did not uncover any drums (Mobil 1989).

As part of the site investigation conducted by Woodward-Clyde Consultants for Mobil Chemical Company, six monitoring wells were installed around the alleged dumpsite. Analytical results of groundwater sampling of these wells indicated the presence of following compounds: toluene (800 milligram per liter [mg/L]), chromium (0.13 mg/L), lead (0.70 mg/L), barium (0.66 mg/L), and mercury (0.00073 mg/L) (Mobil 1989).

One surface water sample and one sediment sample were collected by Woodward-Clyde Consultants at the man-made lake located adjacent to the alleged dumpsite. The only inorganic compound detected in the surface water sample above the detection limit is chromium (0.13 mg/L). The inorganic compounds detected in the sediment sample include: barium (19 milligrams per kilogram [mg/kg]), chromium (130 mg/kg), and lead (5.4 mg/kg). The chemicals detected in the surface water and sediment samples did not correspond to the chemicals reported to be disposed by Mobil Chemical Company (Mobil 1989).

4. SITE RECONNAISSANCE

On May 22 and June 23, 1995, A. Chung and D. Robin of E & E conducted a two-part site reconnaissance at the Mobil Chemical Phosphorus Division site. Mr. Richard Hoyt from Beaver Oil, Inc., accompanied A. Chung and D. Robin during the site reconnaissance. The focus of the site reconnaissance was to determine if TAL/TCL chemicals detected in samples collected from the site could migrate to the unnamed lake, and to determine the current operations and hazardous management practices on site. The site reconnaissance photographs are presented in Appendix A. The following is a summary of observations made during the reconnaissance (E & E 1995a; 1995b).

- The site is currently owned by Beaver Oil, Inc. and was purchased from Montgomery Tank Lines Co. in 1993.
- This site tank area is used as an oil processing, storage, and transfer facility (see Appendix A, Photo 1). Oil processing at this facility includes distillation, acid emulsification, fuel stripping, and separating and filtering of oil.
- The site activity included using small bulldozers to grade areas in the southwest and northeast area of the site. No evidence of drummed waste was observed during grading (see Appendix A, Photo 2).
- There is a narrow vegetated strip of land separating the tank area from the unnamed lake (see Appendix A, Photo 3). There is also a mound of sand placed against the fence separating the tank area from the narrow vegetated strip of land. There is no drainage pathway from the tank area into the unnamed lake.
- All surface runoff from this site drains into the catch basin (see Appendix A, Photo 4). The drainage collected in the catch basin is discharged to the Gary Sanitary District Sewer System.

5. MIGRATION AND EXPOSURE PATHWAYS

This section describes the four migration and exposure pathways associated with the Mobil site. Section 5.1 discusses the groundwater migration pathway; Section 5.2 discusses the surface water migration pathway; Section 5.3 discusses the soil exposure pathway; and Section 5.4 discusses the air migration pathway.

5.1 GROUNDWATER MIGRATION PATHWAY

This section discusses regional geology and soils, groundwater releases, and targets associated with the groundwater migration pathway at the site.

5.1.1 Geology and Soils

The unconsolidated aquifer system in Lake County is composed of the following three heterogeneous sand and gravel aquifers: the Calumet, Valparaise, and Kankakee aquifers. Based on site information, it was determined that the site overlies the Calumet Aquifer. The bedrock aquifer, which also exists in Lake County, is a shallow bedrock system composed of Silurian and Devonian limestone, dolomite, and shale. Due to its significant depth and the high mineral content of the water, this deep bedrock aquifer system is not utilized as a potable water supply (E & E 1987).

5.1.2 Groundwater Releases

An engineered system for groundwater containment, a final cover system, has been installed at the site. However, a potential exists for TCL compounds and TAL analytes to migrate to groundwater in the vicinity of the site. TCL compounds and TAL analytes have been detected in the tank area surface soil samples collected on February 18, 1987. Also, there is no indication that a liner or a leachate collection system was installed at the alleged dumpsite (E & E 1987).

Depth to groundwater is less than five feet below ground surface (BGS) due to the proximity of nearby surface water. As part of the site investigation conducted by Woodward-Clyde Consultants for Mobil Chemical Company, six monitoring wells were installed around the alleged dumpsite. Analytical results of the groundwater sampling of these wells indicated the presence of following compounds: toluene (800 mg/L), chromium (0.13 mg/L), lead (0.70 mg/L), barium (0.66 mg/L), and mercury (0.00073 mg/L) (Mobil 1987). The analytical results are presented in Appendix C. The residents of Gary obtain drinking water from surface water intakes in Lake Michigan (E & E 1987).

5.1.3 Targets

All municipal water systems within the 4-mile radius of the site obtain all of their water supplies from surface water intakes in Lake Michigan. There are no groundwater targets for this site (E & E 1987).

5.2 SURFACE WATER MIGRATION PATHWAY

No engineered systems for surface water containment (e.g., berms, ditches, swales, sewers, or levees) have been installed at the site. There is no surface water drainage route from the tank area to the unnamed lake. Surface water from the tank area could not contaminate the nearby 5-acre unnamed lake via surface water runoff (E & E 1995). The terrain in the alleged dumpsite area slopes toward the man-made lake. The only inorganic compound detected above the detection limit in a surface water sample collected from the man-made lake is chromium (0.13 mg/L). The inorganic compounds detected in the sediment sample include: barium (19 mg/kg), chromium (130 mg/kg), and lead (5.4 mg/kg). No TCL chemicals were detected in sediment and surface water samples collected from the man-made lake. The analytical results are presented in Appendix C. The chemicals detected were not the chemicals reported to be disposed by Mobil Chemical Company (Mobil 1989).

Targets present within 15 miles downstream of the site include sensitive environments. The unnamed lake located near the tank area is allegedly used for fishing and picnic tables are located directly adjacent to the unnamed lake indicating recreational use. There is no wetland frontage along the boundaries of the unnamed lake. The man-made lake located adjacent to the alleged dumpsite is used for fishing, and picnic tables are also located near this lake (E & E 1987). There are approximately 0.3 miles of wetland frontage along the boundaries of the unnamed lake. See Figure 2-1 for a map of nearby wetlands (USFWS 1981).

5.3 SOIL EXPOSURE PATHWAY

The exact dimensions of the area where surficial soil contamination has occurred is unknown. The source was assumed to be the entire 5.3 acres of the tank area. A summary of TAL/TCL chemicals detected in on-site surface soil samples and their corresponding concentrations for the tank area are provided in Appendix C. The general chemical groups detected in the on-site surface soil samples include: volatile organic compounds (VOCs), semi-volatile organic compounds, polynuclear aromatic hydrocarbons, chlorinated hydrocarbons, and heavy metals. TAL chemicals detected in the tank area soil samples include cadmium (3.7 mg/kg) and mercury (7.0 mg/kg). TCL chemicals detected in the tank area soil samples include bis(2-ethylhexyl)phthalate (100 mg/kg), pentachlorophenol (55 mg/kg), and total xylenes (160 mg/kg) (E & E 1987).

The alleged dumpsite was not considered as a source of contamination because the electromagnetic induction survey and selective excavation of this area did not uncover any buried drums. The site is located on beach and shoreline deposits of the Atherton Formation. These beach and shoreline deposits range in thickness from 0 to 65 feet, and are underlain by glacial tills and lacustrine clay between 100 to 150 feet thick. The tills and clays overlie the bedrock. Depth to bedrock is between 150 and 160 feet BGS (Mobil 1989).

A fence with a locked entry gate has been installed around the tank area; therefore, the potential for direct contact with soil is low. There are approximately twelve employees working at the Beaver Oil, Inc. facility that may come in contact with hazardous substances in the soil (E & E 1995a).

The Steelworker's Union Building is located beside the eastern one-half of the alleged dumpsite. The number of employees that may come in contact with hazardous substances in the soil is unknown. The alleged dumpsite appears to be on private property owned by Steelworker's Union, however, there is no fencing around the site to restrict access from trespassers (E & E 1995b).

The potential for worker exposure/injury is currently low at both areas because the wastes are buried. There are no residences within 200 feet of the site. The closest residence is located approximately 1,690 feet (0.3 mile) away. See Appendix D for population estimates. There is no evidence that terrestrial sensitive environments are located on site (E & E 1987).

5.4 AIR MIGRATION PATHWAY

A release of hazardous substances to air is not likely to have occurred. An air emissions containment system (e.g., final cover) has been installed at the site. Also, no air sampling was conducted during the SSI and no record of air emission violations has been cited at this site. An ongoing release of hazardous substances to air is not likely to be occurring at the site based on a review of available file information and the nature of the sources identified at the site (E & E 1987). The Mobil Chemical Corporation Phosphorus Division Gary Plant site is not listed on the RCRIS for the state of Indiana (U.S. EPA 1995).

6. SUMMARY

The Mobil Chemical Corporation Phosphorus Division Gary Plant site consists of two areas: a 5.3-acre tank area and 13-acre alleged dumpsite. In the late 1970s, Mobil Chemical Company decided to sell the property. In accordance with RCRA requirements, prior to the sale, Mobil Chemical Company reported to the U.S. EPA that approximately 100 tons of drummed plant wastes disposed of on the property were solid wastes. Originally, process waste was identified as having been deposited exclusively at the tank area. However, it was later hypothesized by Mobil Chemical Company that this process waste may have been disposed of on the 13-acre area (alleged dumpsite) contiguous to the facility, east of Michigan Street (E & E 1987).

On June 12, 1987, E & E FIT, under contract to the U.S. EPA, conducted an SSI. During the SSI, FIT interviewed the site owner and operator and collected three on-site soil/sediment samples around the two tank areas and within the catch basin as well as a background soil sample. The analytical results from the soil sampling indicated the presence of TAL and TCL chemicals above three times the background concentrations (E & E 1987).

Prior to 1989, Mobil Chemical Company acquired access to the tank area and to other adjacent properties to conduct a thorough investigation of the alleged dumpsite area. In 1989, Woodward-Clyde Consultants were tasked on behalf of Mobil Mining and Minerals Company, a subdivision of Mobil Chemical Company, to conduct geophysical surveys and environmental media testing of groundwater, surface water, and lake sediments surrounding the alleged dumpsite. An electromagnetic induction survey utilizing the in-phase components of the instrument-generated magnetic field was conducted to locate buried drums. The in-phase components are affected by buried metal objects only (Mobil 1989).

All municipal water systems within the 4-mile radius of the site obtain all of their water supplies from surface water intakes in Lake Michigan. There are no groundwater targets for this site (E & E 1987).

No engineered systems for surface water containment (e.g., berms, ditches, swales, sewers, or levees) have been installed at the site. TAL inorganic chemicals detected above background concentrations in the sediment and surface water samples in the man-made lake can adversely affect the 0.3 miles of wetland frontage and the lake fishery. However, there is no evidence that 100 tons of drummed plant waste were buried at the alleged dumpsite area. Furthermore, the chemicals detected in the surface water and sediment samples from the man-made lake did not correspond to the chemicals reported to be disposed by Mobil Chemical Company. Therefore, the source of the inorganic compounds found in the sediment and surface water samples cannot be determined and is not attributable to Mobil Chemical Company's past disposal practices. The sediment and surface water from the unnamed lake located near the tank area was not sampled. However, there is no surface water route for drainage from the tank area into the unnamed lake (E & E 1995b; 1987).

The exact dimensions of the area where surficial soil contamination has occurred is unknown. The source is assumed to be the entire 5.3 acres of the tank area. The alleged dumpsite was not considered as a source of contamination because the electromagnetic induction survey and selective excavation of this area did not uncover any drums. The potential for worker exposure/injury is currently minimal at both areas because the wastes are buried. The Mobil site is fenced and is not located near residences. No schools or daycare facilities are located within 200 feet of the site. The closest residence is located approximately 1,690 feet (0.3 mile) away. There is no evidence that terrestrial sensitive environments are located on site (E & E 1987).

A release of hazardous substances to air is unlikely. No records of complaints regarding odors are known to exist. An air emissions containment system (e.g., final cover) has been installed at the site (E & E 1987).

7. REFERENCES

- Ecology and Environment, Inc. (E & E), June 23, 1995a, Site Reconnaissance Field Logbook, Chicago, Illinois.
- _____, May 22, 1995b, Site Reconnaissance Field Logbook, Chicago, Illinois.
- _____, June 12, 1987, *Screening Site Inspection Report for Mobil Chemical Phosphorus Division*, Chicago, Illinois.
- Mobil Mining and Minerals Company, September 25, 1989, *Environmental Investigation Report: Mobil Michigan Street Project*, Chicago, Illinois.
- United States Environmental Protection Agency (U.S. EPA), 1995, *Resource Conservation and Recovery Information System for Indiana*, Chicago, Illinois.
- United States Fish and Wildlife Service (USFWS), 1981, National Wetland Inventory Map, Gary, Indiana, Quadrangle, Washington, D.C.
- United States Geological Survey (USGS), 1979, *7.5 Minute Series Topographic Map, Gary, Indiana, Indiana Quadrangle*, Reston, Virginia.

APPENDIX A
SITE RECONNAISSANCE PHOTOGRAPHS



PHOTO 1

Date: 6-23-95 Time: 1030 Dir.: Southwest
 Site Name: Mobil Chemical Corporation Phosphorus
 Division Gary Plant Site, IND000606731
 Comments: Tanks on-site are currently used for storage
 of oil.



PHOTO 2

Date: 6-23-95 Time: 1030 Dir.: Southwest
 Site Name: Mobil Chemical Corporation Phosphorus
 Division Gary Plant Site, IND000606731
 Comments: Site operators reportedly have used
 small bulldozers to grade areas in the
 southwest and northeast area of the site
 and observed no evidence of drummed waste.



PHOTO 3

Date: 6-23-95 Time: 1030 Dir.: West

Site Name: Mobil Chemical Corporation Phosphorus
Division Gary Plant Site, IND000606731

Comments: There is a narrow strip of forested area
separating the site from the unnamed lake.



APPENDIX B
4-MILE RADIUS MAP

SDMS US EPA Region V

Imagery Insert Form

Some images in this document may be illegible or unavailable in SDMS.
Please see reason(s) indicated below:

Illegible due to bad source documents. Image(s) in SDMS is equivalent to hard copy.

Specify Type of Document(s) / Comments:

Includes ___ COLOR or RESOLUTION variations.

Unless otherwise noted, these pages are available in monochrome. The source document page(s) is more legible than the images. The original document is available for viewing at the Superfund Records Center.

Specify Type of Document(s) / Comments:

Confidential Business Information (CBI).

This document contains highly sensitive information. Due to confidentiality, materials with such information are not available in SDMS. You may contact the EPA Superfund Records Manager if you wish to view this document.

Specify Type of Document(s) / Comments:

X

Unscannable Material:

Oversized ___ or ___x___ Format.

Due to certain scanning equipment capability limitations, the document page(s) is not available in SDMS. .

Specify Type of Document(s) / Comments:

OVERSIZE MAP – 4 MILE RADIUS MAP

Document is available at the EPA Region 5 Records Center.

Specify Type of Document(s) / Comments: